



New England Vegetable & Berry Growers Association

Sweet Corn!

A Kernal of History

Corn is known to have existed since about 5,000 BC and has been cultivated for about 4,000 years. In the early days of cultivation, corn was starchy and had a tough texture. We refer to this as field corn. This type is still widely grown and used for cattle feed, ground into meal and processed into cereal and other foods.

Sweet corn is a relative newcomer. It has been around for a little over 200 years. Sweet corn is both sweeter and more tender than field corn thanks to a sugary gene, which scientists designate with the symbol *su*. Before sweet corn became widely available, field corn was often picked at an immature stage and cooked.

Yellow, white, yellow and white...what's the difference?

Sweet corn varieties were white until the early 20th century when a yellow variety called Golden Bantam was developed. Later, bi-color sweet corn was developed by crossing yellow and white varieties.



Although many people prefer one color over another, it has little to do with taste or other quality factors such as texture and tenderness. There are, however, differences between varieties within these color groups.

When harvesting, timing is everything

For the best quality, sweet corn should be harvested in the milk stage when the juice inside the kernels is white and sweet. If harvested earlier, the corn lacks flavor, and if picked later, it is tough and starchy.

After picking, sweet corn loses quality because the sugar converts to starch. Warm temperatures speed this conversion. To provide the best possible quality, local growers pick sweet corn every day, in the early morning when temperatures are cool.

The science of making sweet corn better

About 50 years ago, the shrunken gene (*sh2*) was discovered. Corn with this gene is commonly referred to as a **supersweet** type, as it has almost double the amount of sugar in the kernel. The gene also slows the conversion to starch, increasing shelf life. It also results in a harder kernal skin, however, giving it a somewhat crunchy texture. The kernels are less creamy than *su* corn and lack some characteristic corn flavor.

Another type of corn was developed with a sugary enhanced gene (*se*) was developed in the 1960's. *Se* kernels are sweeter (about 50 percent more sugar than *su* kernels) and are creamy with a tender skin.

Plant breeders are constantly working to improve sweet corn and provide more choice. Some of the newer varieties combine characteristics of two or three of the sweet corn types. What ever your preference is for sweet corn, local growers provide it.

The Facts About



Massachusetts sweet corn ...by the numbers

growers	500
acres harvested	6,600
yield per acre	7,500 lbs
total production.....	49.5 million lbs
value of crop statewide	\$15.6 million
national rank for sweet corn production	18th

Source: USDA National Agricultural Statistics Service

Nutrition facts

One medium ear of corn

calories	80
fat	1 gram
fiber	3 grams

Fresh sweet corn is a good source of complex carbohydrate and some protein. Sweet corn is a good source of folate, which may prevent birth defects and heart disease. Yellow varieties of sweet corn supply the antioxidant beta-carotene, which may help prevent some cancer. Fresh sweet corn also provides thiamin, niacin and magnesium.